

CLAIMS

1. A process for deoxygenating a flow comprising at least one fluoro monomer selected from VF₂ and monomers comprising a vinyl group polymerizable by free radicals and at least one fluorine atom, a fluoroalkyl group or a fluoroalkoxy group, directly attached to this vinyl group, said process comprising placing this flow in contact with (i) a sufficient amount of a catalyst whose active sites are elements belonging to groups 8 to 11 of the Periodic Table of the Elements and (ii) for a period which is sufficient to obtain the desired oxygen content.
2. A process according to Claim 1, wherein the support for the active sites is a mineral of alumina, silica, a zeolite or an aluminosilicate.
3. A process according to Claim 2, wherein the catalyst comprises 0.05 - 5% by weight of the active element.
4. A process according to Claim 1, wherein the temperature is 0 - 200°C.
5. A process according to Claim 1, wherein the temperature is 50°C - 100°C.

6. A process according to Claim 1, wherein the active element is copper or palladium.

7. A process according to Claim 1, wherein the flow of deoxygenated VF2 and of optional comonomer comprises less than 5 ppm of oxygen.

8. A process according to Claim 1, wherein the oxygen content is less than 1 ppm.

9. A flow comprising less than 5 ppm of oxygen, and at least one fluoro monomer selected from VF2 and monomers comprising a vinyl group self polymerizable by free radicals, wherein the monomer comprises at least one fluorine atom, a fluoroalkyl group or a fluoroalkoxy group directly attached to this vinyl group.

10. A flow according to Claim 9, comprising less than 1 ppm of oxygen.

11. A PVDF, optionally comprising from 0 to 50% of comonomers, having a melt flow index, measured at 230°C under a 5 kg load, of greater than 50 g/10 min according to ASTM D-1238.

12. A PVDF according to Claim 11, having a melt flow index, of greater than 100 g/10 min according to ASTM D-1238.

13. A PVDF according to Claim 11, having a melt flow index, of greater than 200 g/10 min according to ASTM D-1238.

14. A PVDF according to Claim 11, having a melt flow index, of greater than 400 g/10 min according to ASTM D-1238.

15. A PVDF homopolymer with a level of defects, measured by fluorine NMR, of greater than 6%.

16. A PVDF homopolymer according to Claim 15, with a level of defects, measured by fluorine NMR, of greater than 7%.

17. A PVDF homopolymer with an elastic modulus (at 23°C, according to ASTM D-1708) of between 1020 and 650 MPa.

18. A PVDF homopolymer according to Claim 17, with an elastic modulus (at 23°C, according to ASTM D-1708) of less than 1000 MPa.

19. A PVDF homopolymer according to Claim 17, with an elastic modulus (at 23°C, according to ASTM D-1708) of less than 900 MPa.

20. A PVDF homopolymer according to Claim 17, with an elastic modulus (at 23°C, according to ASTM D-1708) of less than 800 MPa.

21. A PVDF homopolymer according to Claim 17, with an elastic modulus (at 23°C, according to ASTM D-1708) of less than 700 MPa.
22. A PVDF with an Mw/Mn ratio of 1.5 - 1.9.